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(54) **KNEE PROSTHESIS**

(75) Inventors: **William Mihalko**, Germantown, TN
(US); **Khaled J. Saleh**, Springfield, IL
(US); **Said Moussa**, Chamrandes (FR);
Dominique Mouillet, Semoutiers (FR)

(73) Assignee: **Aesculap Implant Systems, LLC**,
Center Valley, PA (US)

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See application file for complete search history.

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Primary Examiner — Jason-Dennis Stewart

(74) *Attorney, Agent, or Firm* — RatnerPrestia

(57) **ABSTRACT**

A knee prosthesis having a femoral component with two condyles, an opening disposed between the two condyles, and a tibial component having bearing surfaces to engage and support each of the femoral component condyles. Moving the femoral and tibial components in flexion from about 0° to about 165° causes medial pivot rotation of the femoral component upon the tibial component. Rotation may be caused by interaction between an asymmetrical cam extending between the femoral condyles and a post disposed between the bearing surfaces and extending superior from the tibial component. Rotation may alternatively be caused by asymmetrical medial and lateral condyles which translate posteriorly upon respective medial and lateral bearing surfaces at disparate rates, without a femoral cam, a tibial post, or a post/cam contact surface. Embodiments of the knee prosthesis may be used in cruciate-substituting or cruciate-retaining procedures. Embodiments of the knee prosthesis may also prevent roll forward.

20 Claims, 15 Drawing Sheets

